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**FOCUSED SITE INSPECTION PRIORITIZATION
SITE EVALUATION REPORT**

**SWIFT AG CHEMICAL FAIRMONT CITY PLANT
2501 NORTH KINGS HIGHWAY
EAST ST. LOUIS, ILLINOIS**

CERCLIS ID NO.: ILD059995423

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY

Site Assessment Section
77 West Jackson Boulevard
Chicago, IL 60604

Date Prepared: September 28, 1995
U.S. EPA Region: 5
Contract No.: 68-W0-0037
Technical Direction Document: T05-9503-237
Prepared by: Alix Rauschman
E & E Program Leader: Steven Skare
Telephone No.: (312) 663-9415



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

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1. INTRODUCTION

The Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT) was assigned by the United States Environmental Protection Agency (U.S. EPA), under Contract No. 68-W0-0037, Technical Direction Document (TDD) T05-9503-237, to evaluate the Swift Ag Chemical Fairmont City Plant (Swift Ag) site located in East St. Louis, St. Clair County, Illinois. E & E performed Focused Site Inspection Prioritization (FSIP) activities for the site to determine to what extent they pose a threat to human health and the environment. This FSIP report presents the results of E & E's evaluation and summarizes site conditions and targets pertinent to the migration and exposure pathways associated with the site background. Background information was obtained from E & E's 1990 Screening Site Inspection (SSI) report, an Illinois Environmental Protection Agency (IEPA) 1989 Screening Inspection report, E & E site photographs taken on April 13, 1995, and an E & E site reconnaissance performed on July 19, 1995.

This report is organized into six sections, including this introduction. Section 2 describes the site and provides a brief site history. Section 3 provides information about previous investigations conducted at the site. Section 4 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration). Section 5 is a report summary. References used in the preparation of this report are listed in Section 6.

2. SITE DESCRIPTION AND HISTORY

The Swift Ag site is located at 2501 North Kings Highway, East St. Louis, St. Clair County, Illinois (SE1/4 sec. 4, T. 2 N., R. 9 W.). The coordinates of the site are latitude 38°52'58" North and longitude 90°10'20" West (IEPA 1989). It is currently an active chemical processing facility which located southwest of Fairmont City, Illinois, on the northeastern edge of the City of East St. Louis, Illinois. The site is bordered on the south by Rose Creek and the Penn Central railroad tracks. A residential area is located south of the site across the railroad tracks. A vacant lot borders the site to the north and west (see Appendix A, photographs 1 and 2). The site is bordered to the east by Kings Highway, directly across from the Allied Chemical Corporation East St. Louis Works chemical manufacturing facility (see Appendix A, photograph 3). The City of East St. Louis has a population of 55,200, and Fairmont City has a population of 2,139 (U.S. Bureau of the Census 1992). The area surrounding the site is industrial and urban (See Figure 2-1).

The site is situated on about 10 acres of land, consisting of seven buildings and fifteen chemical and oil storage tanks scattered throughout the property. The site's features are shown in Figure 2-2. Rose Creek is the closest surface water body, located adjacent to the south side of the site. However, it is an intermittent stream that flows west approximately 2.2 miles west and appears to drain into Old Cahokia Creek, the closest perennial surface water body (United States Geological Survey 1974). The topography of the site slightly slopes to the south (IEPA 1989). Regional groundwater flow direction under the site is west/southwest, towards the Mississippi River (E & E 1990).

E & E's Field Investigation Team (FIT) performed a site reconnaissance and sampling of the Swift Ag site on August 2, 1989. E & E TAT performed a site

reconnaissance of the Swift Ag site on July 19, 1995. The following is a description of the Swift Ag site based on these site visits. The site is completely fenced, with two gates to allow access to the site. One gate is at the main entrance to the site off of Kings Highway, and the second gate is west of the railroad spurs in the southwest corner of the site. This gate appears to be used only for railcar entry and exit from the site (E & E 1990).

An old office building, currently vacant, is located south of the main entrance. A new office building is located west of the entrance, northwest of the old office building. Two small employee buildings are located just south of the new office building (E & E 1990).

The majority of the site area is covered by Building #1, which houses most of the plant operations such as blending and packaging. Building #1, located south of the office and employee buildings, is constructed of concrete and wood and appeared to be in very poor condition at the time of the E & E FIT SSI (E & E 1990). At the time of E & E's 1995 site reconnaissance, Building #1 was still being used for blending and packaging solid fertilizers which contained mono- and di-ammonium phosphates (see Appendix A, photos 6-7). Leftover fertilizers are blown into piles, then swept up and sold for resale to local farmers (Kenna 1995). A hopper loading dock, located near the northeast corner of Building #1, was where discolored soils were observed during the 1989 SSI.

Building #1A is located north and adjacent to Building #1. An empty oil tank and a 10,000-gallon fuel oil tank (Nos. 1 and 2 in Figure 2-2) are located just north of Building #1A. A 30,000-gallon anhydrous ammonia tank and a 12,000-gallon sulfuric acid tank (Nos. 3 and 4), both empty during the time of the SSI, are located at the northwest corner of the Building #1A, and a water tank (No. 5) is located to the west (E & E 1990).

Seven tanks are located at the northwest corner of Building #1 (see Appendix A, photograph 4). Three of the tanks, Nos. 9, 10, and 11, are empty silos which contained unknown prior contents. The other four tanks, Nos. 12, 13, 14, and 15, are surrounded by an earthen berm approximately three feet high. Tank #12 was empty at the time of the SSI and its prior use was unknown. Tanks #13 and #14 were once used to hold phosphoric acid, but were also empty at the time of the SSI. Tank #15, a 12,000-gallon tank, is used for storage of dust-suppressant oil. A small maintenance shed is also located northwest of Building #1 (E & E 1990; E & E 1995a).

Approximately 100 feet north of Building #1, there are six 100,000 gallon concrete tanks for solid fertilizers, and numerous liquid ammonia and fertilizer tanks (see Appendix A,

photographs 8 and 9). Mr. Kenna reported that all of the tanks were empty. This was confirmed during the 1995 site reconnaissance (E & E 1995a).

Approximately 50 feet west of Building #1, there is an area which formerly contained 45,000-gallon underground storage tank (UST). The tank, along with surrounding contaminated soil, was removed in accordance with IEPA and State Fire Marshall regulations. In this same general area there remains two 700-gallon aboveground tanks. The grinding plant located north of the remaining tanks, contains a grinder and a flame-operated dryer. The furnace portion of the dryer contains asbestos. The grinding building is not secured, however, a warning sign is posted in front of the building guarding against asbestos exposure is present. According to Mr. Kenna, Swift Ag is in the process of selecting a contractor for asbestos removal at the site (E & E 1995a).

A former settling basin is located in the northwest corner of the site. When use of the settling basin was discontinued, material from this area was excavated and deposited into the old reservoir, located to the west of Building #1. The settling basin area was then covered with cinders. E & E FIT observed an area of discolored soil near the location of the former settling basin (E & E 1990).

A propane tank (No. 6) and several railroad spurs are located adjacent to western side of Building #1. Two other propane tanks (Nos. 7 and 8) are located at the southeast corner of Building #1 (E & E 1990).

An old pumphouse, which contains a non-functioning well, is located west of the railroad spurs on the western side of Building #1. An abandoned 1,000-gallon reservoir which was previously used to store excavated material from the settling basin is located adjacent to the western side of the old pumphouse. The reservoir had a concrete floor and an open top and was partially filled with fertilizer slurry waste at the time of the SSI. Fill material had been bulldozed over the edge of the reservoir, and portions of the filled-in reservoir are vegetated (E & E 1990).

Several ditches were observed on site during the 1989 SSI. A ditch containing greenish-tinted standing water was observed adjacent to Building #1. This ditch runs from east to west along the north side of Building #1, between the tanks and the building, and then passes through a culvert before exiting the property near the northwest corner of the site. A second ditch was observed at the southeast corner of the site. This ditch, which also contained greenish-tinted standing water, runs a short distance north to south and then flows

into Rose Creek. Rose Creek flows adjacent to the site's southern boundary between the site and the Penn Central railroad tracks (E & E 1990).

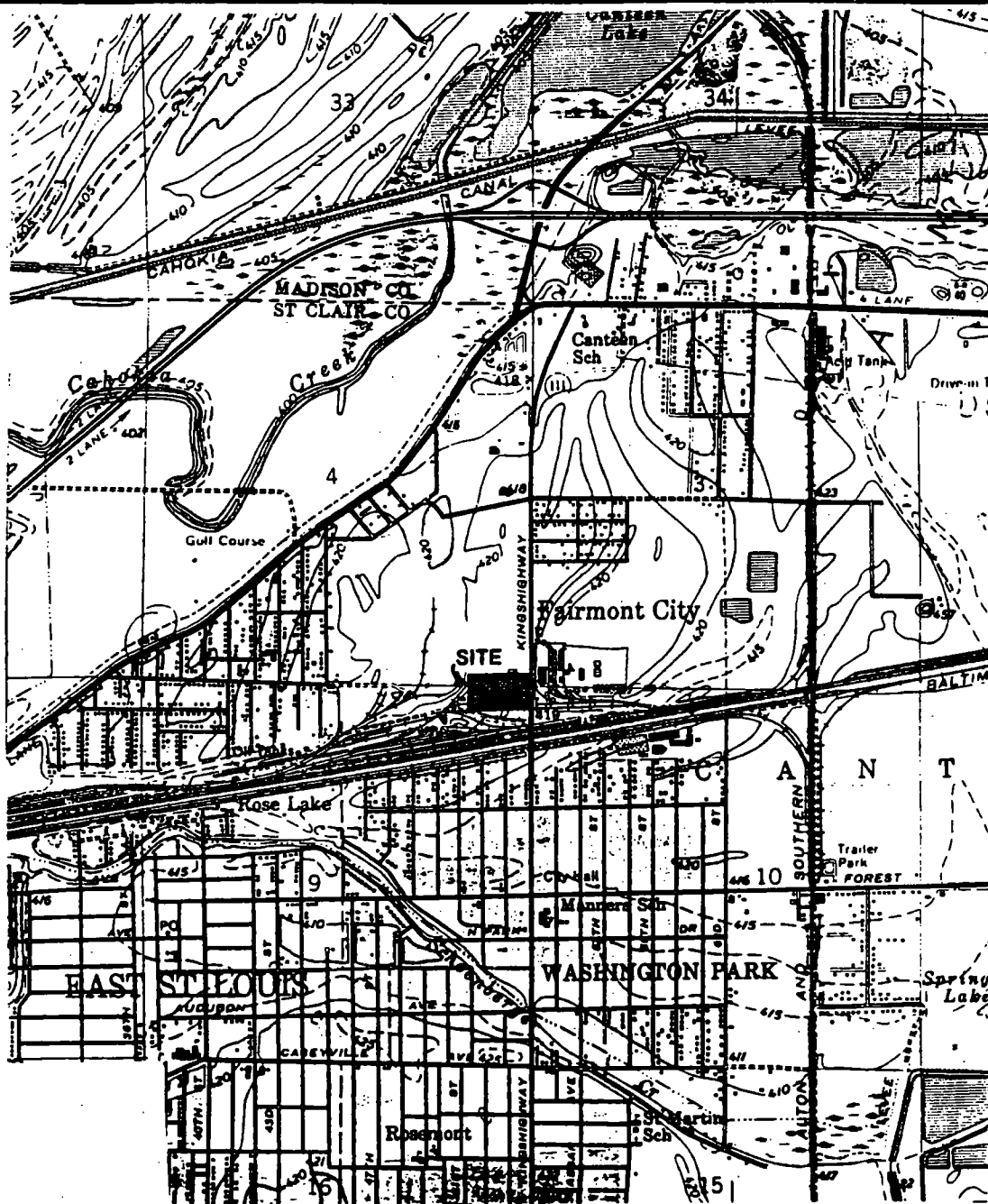
A third drainage ditch was observed adjacent to the site on its north and west sides. The on-site ditch that exits the site at the northwest corner joins with this off-site ditch as it flows along the west side of the site. This ditch also contained greenish-tinted water. Rose Creek passes through a concrete culvert and then joins with this ditch at the southwest corner of the site. These ditches, as well as Rose Creek, all appear to be manmade drainage ditches. Additional culverts were observed at several locations on the west and south perimeters of the site. These culverts consisted of pipes that passed underneath the site fence (E & E 1990).

The Swift Ag site is an active chemical processing facility. It has been in existence since 1931. The original owner of the site was Virginia Carolina Chemical Company. Subsequent owners have included Mobil Chemical (1967 to 1971), Swift and Company (1971 to 1983), and Beatrice, Inc. (1983 to 1986). The current owner of the facility is Vigoro Industries (Britt 1989).

The site has always been operated as a fertilizer production facility. Currently, only dry-mix blending occurs. In the past, the facility utilized both solid and liquid raw materials in a granulation process for fertilizer formation. Raw materials currently utilized at the site include potash, anhydrous ammonia, sulfuric acid, and phosphoric acid. Raw materials are brought in by truck or railroad and are dry-mixed and blended on site prior to packaging and shipping of the fertilizers off site. A on-site wet scrubber is used to control fine-particle air emissions.

Previous waste disposal practices at the site have included the use of a reservoir and a settling basin for the deposition of slurry from the wet scrubber. The 1,000-gallon capacity reservoir was constructed of concrete, but was open to the atmosphere. Eventually, the reservoir was filled and its use was discontinued (Britt 1989).

The Swift Ag Chemical site has been occupied since 1931. The facility does not have Resource Conservation and Recovery Act (RCRA) or National Pollution Discharge Elimination System (NPDES) permits. However, operations at the facility were permitted under an IEPA operating permit (#72100690), issued on July 17, 1989. This permit expired on July 17, 1991. No further information pertaining to this permit was available in site files. No enforcement actions were known to have occurred or are currently pending concerning the Swift Ag site.



SOURCE: Ecology and Environment, Inc. 1990; BASE MAP: USGS, Monks Mound, IL Quadrangle, 7.5 Minute Series, 1954, photorevised 1974.

SCALE
0 1/2 1 MILE

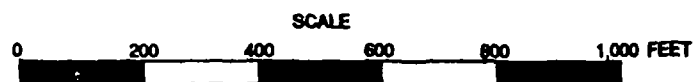
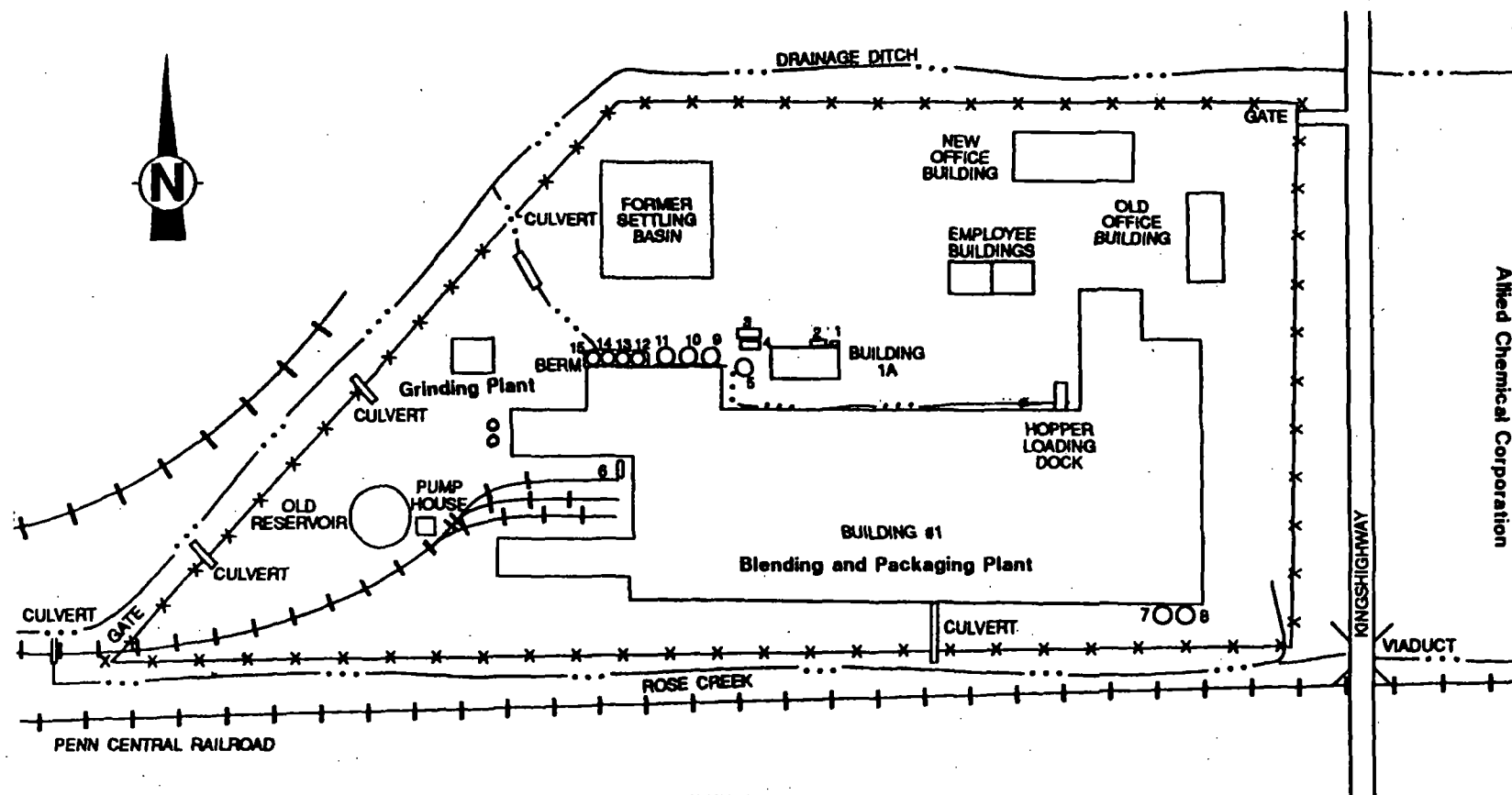


Quadrangle Location




ecology and environment, inc.
Technical Assistance Team
Region V

TITLE	Site Location Map	FIGURE #	2-1
SITE	Swift Ag Chemical Corp.	TELEPHONE	T05-9501-237
CITY	East St. Louis	STATE	Illinois
SCALE	1:24,000	DATE	1972
SOURCE	Ecology and Environment, Inc.	REVISED	1995



LEGEND
1-15 TANKS

 ecology and environment, inc. Technical Assistance Team Region V			
TITLE Site Features Map		FIGURE # 2-2	
SITE Swift Ag Chemical Corp.		ID# T05-9503-237	
CITY East St. Louis STATE Illinois		SCALE Not to scale	
SOURCE Ecology and Environment, Inc.		DATE 1990	
		REVISED 1995	

3. PREVIOUS INVESTIGATIONS

The Swift Ag Chemical site was initially discovered through several complaints received by IEPA concerning waste spills. On August 21, 1973, the U.S. Coast Guard reported to IEPA that an unknown quantity of white material had been discharged from the Swift Ag site to Rose Creek. The discharge occurred when a sulfuric acid tank was being emptied and cleaned to repair a leak (Merz 1973). It was estimated that between 2,000 and 3,000 gallons of sulfuric acid and water were discharged to Rose Creek as a result of the spill (Britt 1989).

IEPA's Division of Water Pollution Control responded by inspecting the Swift Ag site immediately. The investigation revealed that a discharge was not occurring at the time of the site visit. It was apparent, however, that a large volume of this milky white substance had recently been discharged. The analytical results revealed that the liquid was highly acidic and contained excessive concentrations of numerous contaminants (Coyne 1983). Monitoring of the site was to be continued, but no enforcement action or cleanup was required.

On March 7, 1975, an IEPA biologist working in the area of the Swift Ag site observed that water in a drainage ditch adjacent to the site's norther border was green. A conversation between IEPA representatives and the Swift and Company Plant Manger revealed that the green color was caused by a dye used to color fertilizer. The Plant Manager indicated that surface water runoff from the plant area into the drainage ditch occasionally caused the green color in the water. No enforcement action or cleanup of the site was required (Merz 1975).

The site was initially identified to U.S. EPA when it was included on the Waste Disposal Site Survey presented in October 1979 to the Subcommittee on Oversight and

Investigation of the Committee on Interstate and Foreign Commerce, 96th Congress. The site was included in the Illinois portion of this survey.

In 1985, a spill of approximately 1,000 gallons of oil allegedly occurred when a tank valve was mistakenly opened and oil leaked into Rose Creek. The spill was apparently cleaned up, and the cleanup was inspected by IEPA representatives. No further information regarding impacted soils or the amount of soil removed during the cleanup was documented in the site file (Britt 1989). The site was then evaluated in the form of a PA that was submitted to U.S. EPA. The PA was prepared by IEPA April 4, 1986.

On August 2, 1989, E & E FIT conducted an SSI at the Swift Ag site. Twelve soil/sediment samples were collected. Soil sample S1 was a composite surface sample collected from two areas of stained soil located near the hopper loading dock adjacent to Building #1. Surface soil sample S2 was collected from the area between Building #1 and tank 15 (dust suppressant oil). Sediment sample S3 was collected from the ditch that runs from the north side of Building #1 to the northwest side of the site, just prior to its confluence with the off-site ditch located on the west side of the site. Soil sample S4 was collected from within the old reservoir. Surface soil sample S5 was collected from discolored soil in the area of the former settling basin. Sediment sample S6 was collected from within a culvert located at the southwest end of the site. Sediment sample S7 was collected from the same ditch as where sediment sample S3 was collected just prior to its confluence with Rose Creek. Sediment sample S8 was collected just after the ditch confluence with Rose Creek. Sediment sample S9 was collected from the ditch located at the southeast corner of the site, just prior to its confluence with Rose Creek. Sediment sample S10 was collected from Rose Creek just prior to reach the site at its southeast corner. Sediment sample S11 was collected from the same ditch as samples S3, S7 and S8 just prior to its reaching the northeast corner of the site. Potential background sample S12 was collected from beneath a tree in front of the old office building at the northeast corner of the site (E & E 1990). All sediment/surface water samples contained volatile organic compounds (VOCs), base-neutral acids (BNAs), pesticides, and inorganics. Contaminants of concern are as follows: methylene chloride was encountered in the background sample at 14 micrograms per kilogram ($\mu\text{g}/\text{kg}$). No samples contained methylene chloride at concentrations greater than three times the background sample. Sample S3 contained benzene at 4 $\mu\text{g}/\text{kg}$. All samples contained polynuclear aromatic hydrocarbons (PAHs), phthalates, and phenols. Background sample S12 contained naphthalene at 40 $\mu\text{g}/\text{kg}$,

4-chloro-3-methylphenol at 45 $\mu\text{g/kg}$, phenanthrene at 51 $\mu\text{g/kg}$, fluoranthene at 50 $\mu\text{g/kg}$, pyrene at 55 $\mu\text{g/kg}$, chrysene at 45 $\mu\text{g/kg}$, and benzo(b)fluoranthene at 66 $\mu\text{g/kg}$. All samples that contained these contaminants contained them at concentrations greater than three times the background concentration. The background sample did not contain any pesticides. Sample S6 contained dieldrin at 4,000 micrograms per kilogram ($\mu\text{g/kg}$), and samples S1 and S6 contained gamma chlordane at 230 $\mu\text{g/kg}$ and 350 $\mu\text{g/kg}$, respectively. Sediment samples S3 and S7 contained gamma chlordane at 1,700 $\mu\text{g/kg}$ and 430 $\mu\text{g/kg}$, respectively. These samples also contained dieldrin at 290 $\mu\text{g/kg}$ and 340 $\mu\text{g/kg}$, respectively. The presence of these chemicals can be attributed to the use of these pesticides (E & E 1990).

Background sample S12 contained the following inorganics of concern: arsenic at 3.4 milligrams per kilogram (mg/kg), beryllium at 116 mg/kg , chromium at 15.3 mg/kg , and iron at 17,400 mg/kg . Samples S1, S6, S7, S8, S9, and S10 contained arsenic at concentrations greater than three times the background concentration. Samples S3, S4, S6, and S10 contained beryllium at concentrations greater than three times the background concentration. Samples S4, S6, S7, S8, S10, and S11 contained chromium at concentrations greater than three times the background concentration. No samples contained iron at concentrations greater than three times the background concentration. Mercury was encountered in all samples, but S4. A sample location diagram and analytical data are included in Appendix B of this report.

4. MIGRATION AND EXPOSURE PATHWAYS

This section describes the four migration and exposure pathways associated with the Swift Ag site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

4.1 GROUNDWATER MIGRATION PATHWAY

This section discusses regional geology and soils, groundwater releases, and targets associated with the groundwater migration pathway at the site.

4.1.1 Geology and Soils

The area surrounding the Swift Ag site is located on top of unconsolidated valley fill and valley train materials ranging in thickness from 50 to 120 feet (Schicht 1965). The valley fill material is composed of alluvial deposits (sands, gravels, and clays) that overlie the older valley train deposits (outwash sands and gravels from glacial meltwater), which range in thickness from 30 to 40 feet (Schicht 1965). The bedrock underlying the unconsolidated valley fill and valley train deposits consists of the Mississippian-age Lower Chesterian Series. Limestones, sandstones, and shales make up the series, which ranges in thickness from 100 to 300 feet (Student *et al.* 1981).

Area well logs indicate that local wells are screened primarily in sand and gravel units in the unconsolidated deposits at a relatively shallow depths. Other wells in the vicinity of the site, however, are sunk to depths ranging from 30 to 116.5 feet and are generally used for irrigation, industry, and drinking water (E & E 1990). Fill and valley train deposits are

hydraulically connected to the bedrock; therefore, the aquifer under investigation includes both the unconsolidated valley fill and valley train deposits as well as the Lower Chesterian bedrock series. According to area well logs, the depth to the unconsolidated deposits is approximately six feet. Depth to groundwater is approximately 30 feet, and the groundwater flow direction under the site is toward the west/southwest (E & E 1991).

4.1.2 Groundwater Releases

A release of hazardous substances from the Swift Ag site to groundwater is possible. However, no groundwater samples were collected at the site during the 1989 SSI to determine if site-related contaminants were present in groundwater downgradient of the site. The site is not known to have any on-site monitoring wells.

There are no engineered containment devices on site that would prevent the downward migration of contaminants to the groundwater. It is possible that Target Analyte List (TAL) and Target Compound List (TCL) chemicals could impact the groundwater that may exist beneath the site. Due to the high hydraulic conductivity of the underlying soil strata, it is possible that contamination could migrate down to deeper aquifers and affect the Illinois-American Water Service wells.

4.1.3 Targets

Approximately 1,797 persons are served by the Mound Public Water Supply (PWS), which draws its drinking water from one groundwater well located within the town of State Park, Illinois, a town located approximately 2.25 miles northeast of the site (USGS 1974; Carsellus 1995; Mound PWS 1995; 1995a). Since groundwater flows west/southwest, it is unlikely that the well that serves the State Park area would be impacted by on-site contaminants due to its location in reference to groundwater flow direction.

Outside of the Illinois-American Water Company water supply area and the Mound PWS service boundaries, there are approximately 734 persons who obtain drinking water from private wells within a 4-mile radius of the site and are therefore potential targets for groundwater contamination (E & E 1990a). The remaining population within a 4-mile radius of the site obtains drinking water from intakes located in the Mississippi River.

4.2 SURFACE WATER MIGRATION PATHWAY

A release to the intermittent surface water pathway, Rose Creek, has been documented, however, it is unlikely that a release to the closest perennial surface water body, Old Cahokia Creek, has occurred. Twelve soil/sediment samples were collected along various drainage ditches and on-site locations during the E & E FIT 1989 SSI. Contaminants of concern, including arsenic, benzo(a)pyrene, beryllium, chlordane and dieldrin were detected at concentrations greater than three times background levels (IEPA 1994). Rose Creek, an intermittent stream, is not likely to serve as a perennial source of contaminant loading to Old Cahokia Creek. It is unknown whether the site is prone to flooding, but is located within a 100-year floodplain of Old Cahokia Creek (IEPA 1989).

The Audubon Avenue Heron Colony, located at the intersection of 26th Street and Audubon Avenue, and the Fairmont City Site, located west of Fairmont City and south of Old Cahokia Creek, are two natural areas listed in the Illinois Natural Heritage Database. These potentially sensitive areas are within a 15 miles radius of the site. The Holten State Park, which contains Whispering Pond, is located in Centreville County, approximately 3 miles southeast of the site (United States Geological Service [USGS] 1974). Whispering Pond is a state-designated fishery (Illinois Department of Conservation [IDOC] 1991). None of these areas are likely to be impacted by site-related contaminants due to the lack of an overland surface water pathway from the Swift Ag site to these areas.

Approximately 300,000 persons within a 4-mile radius of the site obtain drinking water from the Illinois-American Water Company, which draws its water from two intakes on the Mississippi River located upstream from the site (Buck 1995).

Rose Lake, which appears to be an intermittent lake, is approximately 0.1 miles southwest of the site. It does not appear that Rose Creek flows into Rose Lake because Rose Lake is located south of the Penn Central Railroad tracks and Rose Creek runs east to west along the north side of tracks (USGS 1974). The ecological significance of Rose Lake is unknown.

Threatened and endangered species live within St. Clair County. The capacity with which animal species could be affected by on-site contaminants is unknown. Species that come in contact with the site may be exposed to on-site contaminants via dermal contact and incidental ingestion of soil and surface water (IEPA 1994). See Appendix C for a listing of threatened and endangered species in St. Clair County.

4.3 SOIL EXPOSURE PATHWAY

A release of hazardous substances from the Swift Ag site to on-site soil is documented. Soil and sediment sample collected during the 1989 SSI indicated the presence of heavy metals, pesticides, and PAHs at levels exceeding three times the background concentrations. There are no containment devices around the on-site tanks or loading dock that would prevent soil contamination in the event of an on-site spill/leak (E & E 1990).

According to the E & E TAT 1995 site reconnaissance, the Swift Ag site is currently fenced and inaccessible to the public. The site is located in a densely populated area, however, and there is evidence of past trespassing on site (E & E 1995a). Two schools are located approximately 1 mile (straight-line distance) southeast and southwest of the site. The nearest residences are located approximately 900 feet (straight-line distance) southeast of the site. A nursing home is located approximately 2,600 feet (straight-line distance) southwest of the site (IEPA 1980). The chemicals used and wastes generated at the site could present a potential threat to workers and trespassers. The railroad tracks that compose the south border of the site may or may not provide an adequate barrier between the residential areas and the site. There are approximately 8,934 persons within a 1-mile radius of the site (USGS 1974).

4.4 AIR MIGRATION PATHWAY

A release of hazardous substances to air is possible based on the site history involving spills of surface acid into Rose Creek in the 1970s. The site is currently active, however, there are no recorded complaints of air emissions problems in IEPA files. A wet scrubber is used to control particulate emissions generated from the blending process. There were no other documented air pollution control devices on site at the time of the E & E FIT 1989 SSI and the E & E TAT 1995 Site Reconnaissance. There are approximately 25 workers presently on site who potentially could be exposed to the chemicals present on site. It is not known if filters or respirators are used when the fertilizers are mixed and packaged. Sensitive environments located within a 4-mile radius of the site are not likely to be impacted by on-site airborne contaminants (E & E 1989; 1995, 1995a).

5. SUMMARY

The Swift Ag site, currently owned by Vigoro Industries, has been an active fertilizer/chemical facility since 1931. Analytical data from the 1989 SSI documents the presence of contamination in on- and off-site soils and sediments. Drainage ditches that flow off site contained contaminants that could migrate to Rose Creek. Rose Creek, an intermittent surface water body, flows west towards Rose Lake, the closest potentially sensitive environment to the site, however, it does not appear that these two surface water bodies are surficially connected due to the presence of the Penn Central railroad line which run between them.

A release to groundwater is possible; however, the population that utilizes private wells within a 4-mile radius of the site is small, and public groundwater is primarily obtained from the Illinois-American Water Company or from the Mound PWS. Approximately 300,000 persons within a 4-mile radius of the site obtain drinking water from the Illinois American Water Company which obtains surface water from 2 intakes on the Mississippi River, upstream of the site. The Mound PWS obtains water from a well located in State Park, Illinois, approximately 2.25 miles northeast of the site. It is unknown where the private wells in the area are located.

A release of hazardous substances to the closest perennial surface water body, Old Cahokia Creek, is unlikely. The Swift Ag site is currently active, and there is a potential that contaminants could migrate off site via surface water pathways. Drainage ditches located on the north, west, and south sides of the site drain into Rose Creek, an intermittent stream which flows west approximately 2.2 miles to Old Cahokia Creek (USGS 1974). Due to the

intermittent nature of Rose Creek, it is unlikely that contaminants migrate to Old Cahokia Creek. The site is within the 100-year floodplain of Old Cahokia Creek.

The Audubon Avenue Heron Colony, the Fairmont City Site, and Rose Lake are 3 natural areas within a 4-mile radius of the Swift Ag site. However, land barriers such as roads and residential areas probably prevent on-site contamination from migrating into these areas. Therefore, these terrestrial areas are not likely to be affected by on-site contamination. Horseshoe Lake, located approximately 2.5 miles (straight line distance) northwest of the site, would not be affected by on-site contamination since it is unlikely that contaminants could migrate to Old Cahokia Creek which flows into Horseshoe Lake. Horseshoe Lake is a state-recognized fishery (IDOC 1991). Holten State Park, located in Centreville County, is approximately 3 miles (straight line distance) southeast of the site (United States Geological Service [USGS] 1974), would also not be affected by off-site contaminant migration. Whispering Pond, a lake within Holten State Park is a state-recognized fishery (IDOC 1991). Threatened and endangered bird species that live within St. Clair County could be exposed to on-site contaminants via dermal contact.

Humans that reside within 0.25 miles of the site may be impacted by on-site contaminants via dermal soil exposure and incidental soil ingestion. Trespassers could be exposed to on-site contaminants via dermal soil exposure and incidental soil ingestion. There are 20 to 25 workers on site who are at a risk to asbestos, pesticide, and fuel oils via inhalation, dermal contact, and incidental ingestion exposure.

A release of hazardous substance to air is possible, due to the fertilizer production operations at the facility and the chemicals stored on site. The mixing operations have a wet scrubber system to control fine particulate emission generated during the blend process. It is not known if site worker wear filters or respirators while working in this area of the facility. There is no documentation of any complaints or air releases from the site which have affected the wetlands or surrounding residential areas.

6. REFERENCES

References not included in Appendix D: documents that are currently available within U.S. EPA files; copyrighted documents that are currently available in E & E's library; maps produced by either the United States Geological Survey; and documents that are created by the various state agencies for public use.

Britt, R., August 2, 1989, Plant Manager, Vigoro Industries, Fairmont City, Illinois, site representative interview, conducted by Regina Bayer of E & E FIT, Chicago, Illinois.

Buck, Andy, August 10, 1995, Illinois State Water Survey, telephone conversation, contacted by Alix Rauschman of E & E TAT, Chicago, Illinois.

Carsellus, R., August 15, 1995, Mounds Public Water System, telephone conversation, contacted by Alix Rauschman of E & E TAT, Chicago, Illinois.

Child, W. February 3, 1972, MDSI, letter, to C.E. Clark, Chief, IEPA-DLPC, Re: IEPA inspection of Swift Ag site in July 1971.

Ecology and Environment, Inc., July 27, 1995a, site reconnaissance visit of the Swift Ag Disposal Systems, Inc. site, performed by Sam Sirhan, E & E TAT, Cincinnati, Ohio.

_____, April 13, 1995, site drive-by, performed by Chad Eich and Bob Meyers of E & E TAT, Chicago, Illinois.

_____, May 2, 1990, *Screening Site Inspection Report for Swift Ag Chem--Fairmont City Plant, AKA Estech Brand Fertilizer, U.S. EPA ID: ILD059995423*, Chicago, Illinois.

Illinois Department of Conservation, Division of Fisheries, August 23, 1995, telephone conversation, contacted by Alix Rauschman of E & E TAT, Chicago, Illinois.

Illinois Environmental Protection Agency (IEPA), 1994, Natural Heritage Database, Springfield, Illinois.

_____, July 11, 1989, *Site Inspection Report, Swift Ag Chemical-Fairmont City Plant, U.S. EPA ID No.: ILD059995423*, Springfield, Illinois.

_____, April 24, 1980, Drawing No. 101 from memorandum to State file, Springfield, Illinois.

Merz, E.W., August 21, 1973, Collinsville Unit, IEPA, Collinsville, Illinois, Memorandum, to Division of Water Pollution Control, Field Operations Section, IEPA, concerning green discharge in drainage ditch near the Swift Ag site.

Merz, E.W., March 7, 1975, Memorandum to the Division of Water Pollution Control, Field Operation Section, Interview with Mr. Robert Britt, Plant Manager.

Mounds Public Water Supply, August 10, 1995, employee, Collinsville, Illinois, telephone conversation, contacted by Alix Rauschman of E & E TAT, Chicago, Illinois.

_____, August 18, 1995a, employee, Collinsville, Illinois, telephone conversation, contacted by Alix Rauschman of E & E TAT, Chicago, Illinois.

Schicht, R.J., 1965, *Groundwater Development in East St. Louis Area, Illinois*, Illinois State Water Survey, Urbana, Illinois.

Student, J.D., R. Piskin, L.J. Whithers, and J. Dickman, September 1981, *Aquifers of Illinois: Underground Sources of Drinking Water and Non-Drinking Water*, IEPA, Division of Land/Noise Pollution Control, Springfield, Illinois.

United States Bureau of the Census, 1992, *1990 Census of Population Characteristics of the Population, General Population Characteristics, Illinois*, Washington, D.C.

United States Department of the Interior, 1984, *National Wetlands Inventory Map, Monks Mound, Illinois Quadrangle*, Washington, D.C.

United States Geological Survey, 1954, *7.5 Minute Series Topographic Maps, Monks Mound, Illinois Quadrangle, photo revised 1974*, Reston, Virginia.

APPENDIX A

1995 SITE RECONNAISSANCE PHOTOGRAPHS

Photo: 1

Direction: Southwest

Time: 12:03

Date: April 13, 1995

Description:

Showing property which
adjoins Swift Ag on the
north. Swift Ag in
background.



Photo: 2

Direction: Southwest

Time: 12:03

Date: April 13, 1995

Description:

Showing main entrance
with main building in
background.



Photo: 3

Direction: East

Time: 12:03

Date: April 13, 1995

Description:

Showing the chemical plant located across Kings Highway from Swift Ag.



Photo: 4

Direction: south/
southwest

Time: 8:53

Date: July 27, 1995

Description:

Northwest corner of
the main building.
Showing silos 9, 10,
and 11.



Photo: 5

Direction: South

Time: 12:03

Date: April 13, 1995

Description:

Shows Swift Ag in background and adjoining property to the north in foreground.



Photo: 6

Direction: Northwest

Time: 12:03

Date: April 13, 1995

Description:

Showing the southern side of the Swift Ag property.



Photo: 7

Direction: Southwest

Time: 8:43

Date: July 27, 1995

Description:

East side of main
building.



Photo: 8

Direction: Southwest

Time: 8:35

Date: July 27, 1995

Description:

Empty concrete tank.

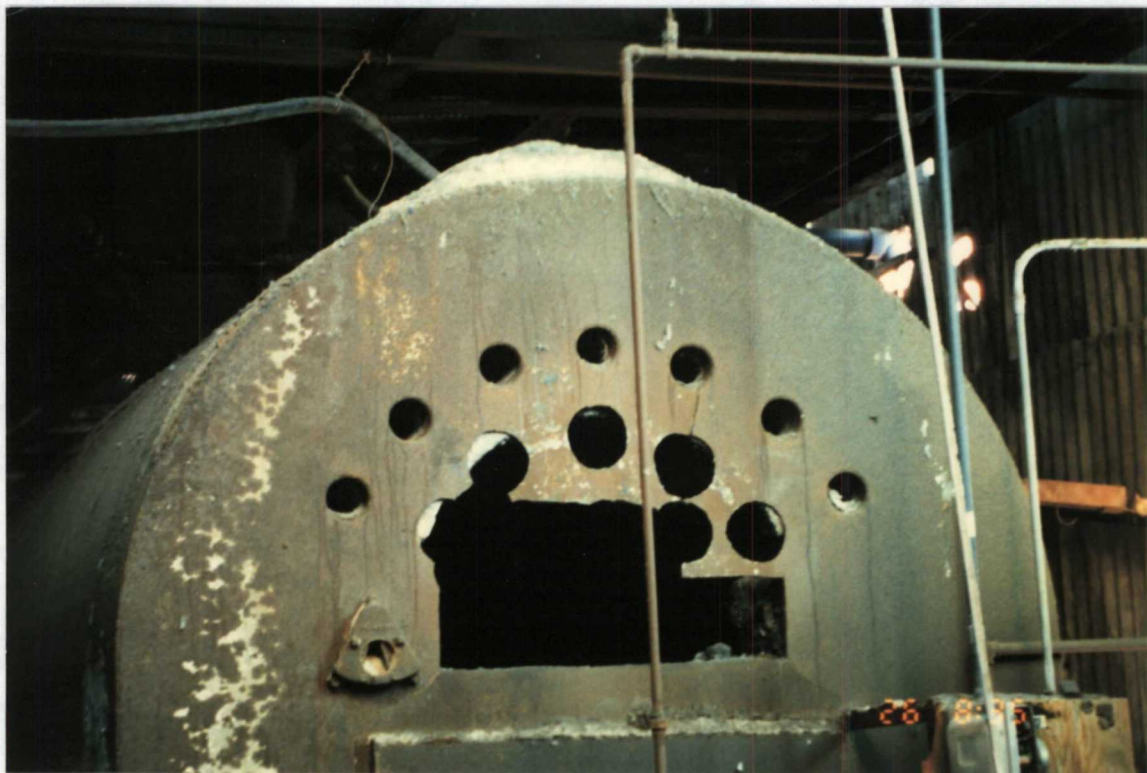


Photo: 9

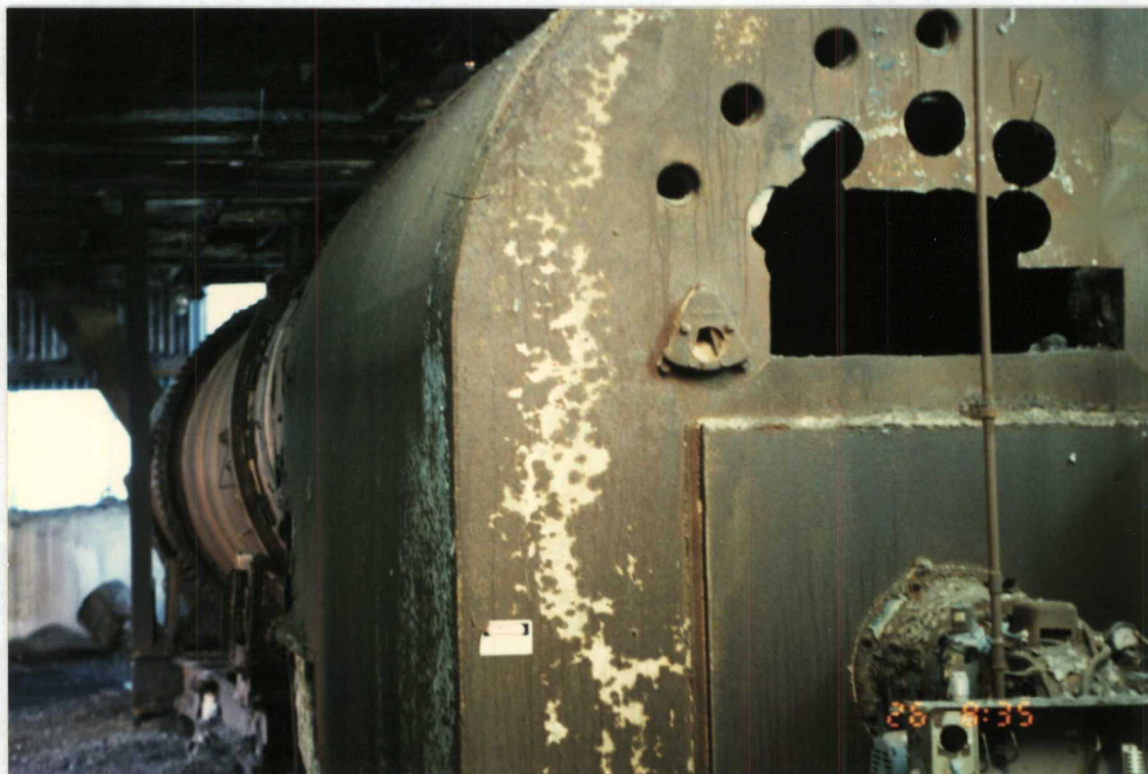
Direction: Southwest

Time: 8:35

Date: July 27, 1995

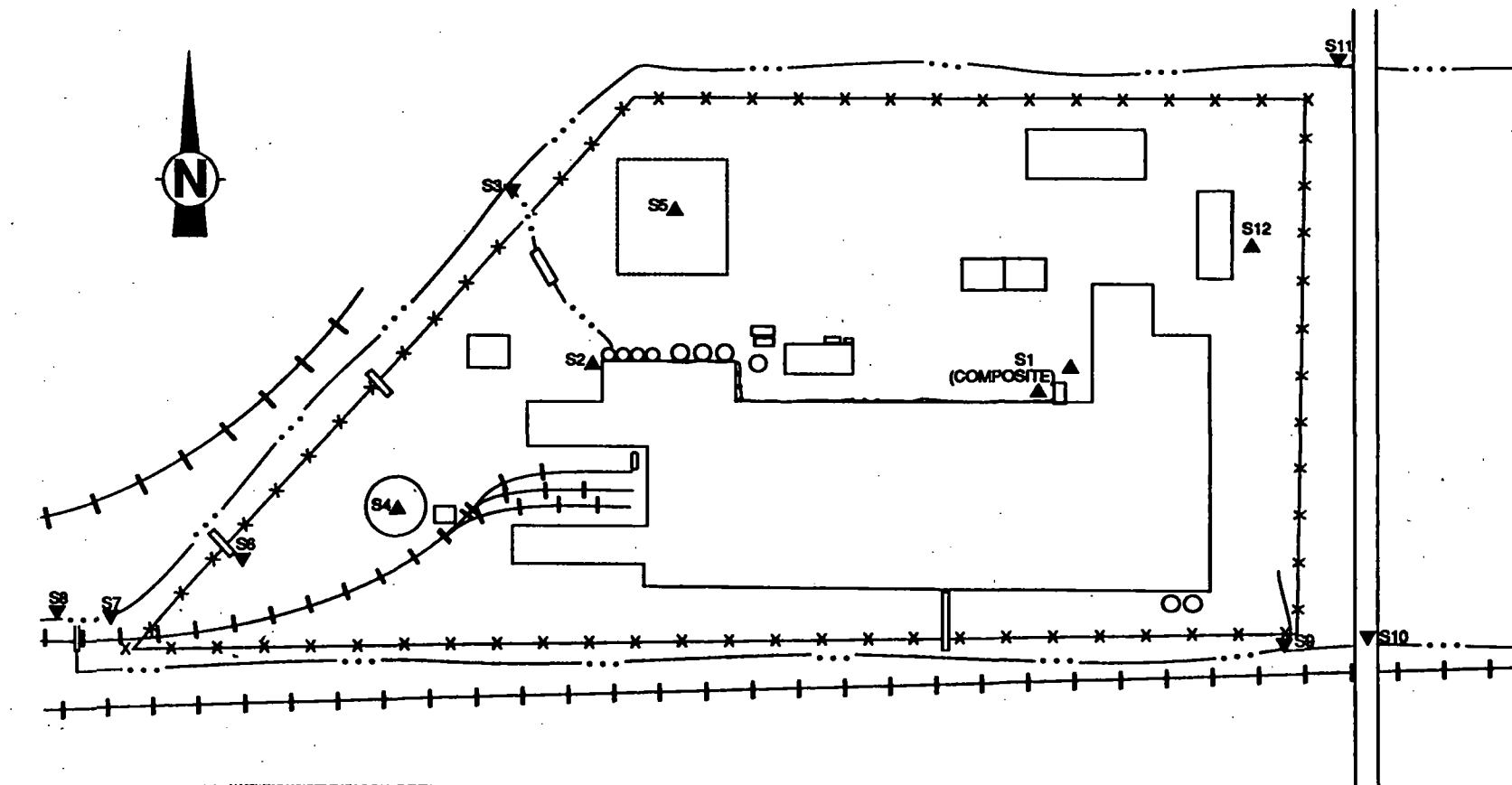
Description:


Empty concrete tank.



APPENDIX B

1990 SCREENING SITE INVESTIGATION SOIL SAMPLING LOCATIONS AND ANALYTICAL RESULTS



 ecology and environment, inc. Technical Assistance Team Region V			
TITLE	Soil/Sediment Location Map	FIGURE #	2-3
SITE	Swift Ag Chemical Corp.	TDD#	T05-9503-237
CITY	East St. Louis	STATE	Illinois
SOURCE	Ecology and Environment, Inc.	SCALE	Not to scale
		DATE	1990
		REVISED	1995

RESULTS OF CHEMICAL ANALYSIS OF
FET-COLLECTED SOIL/SEDIMENT SAMPLES

Sample Collection Information and Parameters	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
Date	8/2/89	8/3/89	8/17/89	8/3/89	8/2/89	8/2/89	8/17/89	8/17/89	8/3/89	8/3/89	8/3/89	8/3/89
Site	1100	1110	1120	1140	1150	1150	1150	1150	1140	1140	1140	1140
US Organic Traffic Report Number	EPA12	EPA13	EPA14	EPA15	EPA16	EPA17	EPA18	EPA19	EPA20	EPA21	EPA22	EPA23
US Organic Traffic Report Number	MEEP12	MEEP13	MEEP14	MEEP15	MEEP16	MEEP17	MEEP18	MEEP19	MEEP20	MEEP21	MEEP22	MEEP23
Compounds Detected (Values in ug/g)												
Volatile Organics												
ethylene chloride	53	5	37	13	33	93	233	--	--	363	283	14
acetylene	--	--	32	--	54	46	2403	573	--	2103	1303	--
1,2-dichloroethane (HBM)	--	--	--	--	--	--	233	--	--	213	213	--
benzene	--	--	43	--	--	--	--	--	--	--	--	--
1,1,2-trichloroethane	--	--	--	--	--	--	--	133	--	--	--	--
toluene	53	16	36	14	110	--	--	93	--	53	--	--
ethylbenzene	--	--	53	--	--	--	--	--	--	--	--	--
xylene (total)	--	--	22	--	--	--	--	--	--	--	--	--
Semivolatile Organics												
2,4-dichlorophenol	--	--	--	--	--	--	--	--	--	1,300	--	--
naphthalene	--	803	--	--	--	--	--	--	1303	3603	1703	403
4-chloro-3-methylphenol	--	--	--	--	2003	--	--	--	--	--	--	--
2-methylnaphthalene	--	463	--	--	--	--	--	13,0003	2903	8703	1103	453
acenaphthylene	--	453	--	--	1003	--	--	--	--	--	--	--
acenaphthene	--	--	--	--	873	--	--	--	1703	2103	1003	--
dibenzofuran	--	--	--	--	--	--	--	--	2303	2703	1103	--
diethylphthalate	--	--	--	--	--	--	--	--	--	--	4503	--
fluorene	--	--	--	--	--	--	--	3,7003	2403	2703	1603	--
hexachlorobenzene	--	983	--	--	2403	--	--	--	--	--	--	--
phenanthrene	660	2903	--	--	1,103	--	673	14,0003	3,600	4,300	1,300	513
anthracene	1003	--	--	--	2503	--	--	--	630	5203	2503	--
dimethylphthalate	--	--	--	--	--	--	--	--	--	1703	--	--
fluoranthene	2,350	2003	--	2,700	1,803	7803	2,0003	--	3,800	5,200	1,900	503
pyrene	3,9003	480	5003	3,5003	1,8003	8703	2,6003	--	3,400	4,0003	2,0003	553
butylterephthalate	--	--	--	--	--	--	--	--	--	--	2003	--
benzofluoranthene	1,0003	3303	--	2403	1,103	--	1,8003	--	1,703	1,200	703	--
chrysene	2,0003	3603	3303	2303	503	1,703	2,603	--	1,603	1,800	1,100	453
bis(2-ethylhexyl)phthalate	6,1003	1,400	6003	5,003	2703	--	3,4003	--	4,300	1,600	2,600	--
benzofluoranthene	2,8003	4303	2503	6503	1,203	--	5,300	--	1,803	1,700	1,200	663
benzofluoranthene	1,3003	3103	--	2503	8703	1,3003	--	--	1,203	5303	850	--
benzofluoranthene	1,7003	2703	--	3503	6003	8403	2,1003	--	1,200	6303	990	--
indeno(1,2,3-cd)pyrene	1,4003	3203	--	--	5003	--	1,8003	--	840	4303	750	--
dibenz(a,h)anthracene	2403	--	--	--	--	--	--	--	1903	--	1303	--
benzofluoranthene	--	3203	--	--	4203	--	1,8003	--	800	4403	--	--

Sample Collection Information
and Parameters

	S1	S2	S3	S4	S5	S6	Sample Number S7	S8	S9	S10	S11	S12
Hexachlorocyclopentadiene	--	--	4,81000	--	--	--	51	--	--	--	--	--
Hexachlorobenzene	290	250	200	--	1400	4,1000	3400	270	80	350	210	--
1,4-dichlorobenzene	--	--	--	--	--	--	--	--	40	1,50000	--	--
4,4'-dichlorodiphenyl ether	--	--	--	--	--	--	--	--	300	1,70000	--	--
alpha-Chlordane	--	--	--	--	--	--	--	--	--	--	270	--
gamma-Chlordane	2300	--	1,70000	--	1600	3000	4000	1400	6.40	--	350	--
Analyte Detected												
(val. in brackets)												
aluminum	10,400	7,600	7,550	26,100	10,100	20,700	13,970	19,700	12,200	26,000	6,360	1,840
antimony	13.4B	--	--	--	--	--	--	--	--	12.2B	--	--
arsenic	13.7JMB	6.2JMB	4.4JN	--	25.6JN	13.2JMB	26.0JMB	24.6JN	15.6JN	27.8JN	5.5JN	3.4JN
barium	100	83.9	450	628	179	505	150	340	304	570	150	110
beryllium	1.8	1.6	0.550	3.1	1.0	2.1	2.10	1.70	0.450	0.740	0.600	0.460
cadmium	28.7	27.8	14	13.7	60	76.0	240	300	5.7	6.4	14.0	--
calcium	160,000	172,000	56,200	100,000	111,000	32,000	26,140	62,300	19,300	13,700	113,000	55,700
chromium	51.5	48	33.3	300	55.8	80	76.0	450	29.0	50.0	45.9	15.3
cobalt	14	6.70	3.20	27.60	11.50	9.10	6.50	110	3.30	4.10	3.60	8.30
copper	1,530JA	680JA	112JA	84.8JA	610JA	457JA	720JA	446JA	144JA	350JA	187JA	18.9JA
iron	21,800	18,500	14,500	38,400	24,500	45,600	26,950	33,100	14,900	21,300	17,100	17,400
lead	523JN	1,790JN	526JN	281JN	2,610JN	1,300JN	1,607JN	2,200JN	650JN	1,800JN	2,030JN	35.3JN
cesium	8,690	6,690	1,740	46,500	6,800	2,340	3,250	7,270	2,040	2,680	9,280	19,800
manganese	3,980	2,650	460	1,830	890	254	930	720	180	110	754	785
mercury	0.4JN	0.6JN	5.3JN	--	6.4JN	2.7JN	8.0JN	12JN	6.2JN	10JN	0.5JN	--
nickel	59.4	32	22.2	79.7	35.3	8.20	21.90	26.6	8.90	3.00	13.5	15.7
potassium	6,310	3,980	6,130	33,900	6,750	13,200	6,660	3,820	1,960	6,940	8090	7970
selenium	--	--	0.35JMB	--	--	--	3.0JMB	1.8JMB	0.57JMB	0.93JMB	--	--
silver	31.5JAN	2.2JAN	1.4JAN	3.4JAN	6.6JAN	6.0JAN	10.2JAN	7.2JAN	2.2JAN	2.6JAN	3.9JAN	--
sodium	--	--	6800	1,3600	--	--	--	--	--	4,630	--	--
thallium	1.2JMB	--	--	--	2.0JMB	--	2.4JMB	1.3JMB	0.70JMB	--	--	--
vanadium	59.2	56.2	38.3	124	45.6	119	85.4	77.2	26.5	61.4	45.0	21.5
zinc	8,220	27,400	1,760	2,660	21,360	9,230	32,700	25,400	820	1,370	1,680	147
cyanide	--	2.8JN	--	4.2JN	1.1JN	2.3JN	--	--	--	--	--	--

-- Not detected.

COMPOUND QUALIFIERS

E

Indicates an estimated value.

C

This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides identified in the first extract shall be confirmed by GC/MS.

D

This flag identifies all compounds identified in an analysis at a secondary solution factor.

INTERPRETATION

Compound value may be semiquantitative.

Compound was confirmed by GC/MS and is quantitative. Use pesticide/ECF listed values.

Alerts data user to a possible change in the CROL. Data is quantitative.

ANALYTE QUALIFIERS

M

Spike recovers outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.

A

Duplicate value outside QC protocols which indicates a possible matrix problem.

+

Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.

B

Value is real, but is above instrument DL and below CROL.

J

Value is above CROL and is an estimated value because of a QC protocol.

U

Post-digestion spike for furnace AA analysis is out of control limits (3S-115%), while sample absorbance is <50% of spike absorbance.

INTERPRETATION

Value may be quantitative or semi-quantitative.

Value may be quantitative or semi-quantitative.

Data value may be biased.

Value may be quantitative or semi-quantitative.

Value may be semiquantitative.

Value may be semiquantitative.

Source: Ecology and Environment, Inc. 1990.

APPENDIX C

ENDANGERED SPECIES LIST FOR ST. CLAIR COUNTY, ILLINOIS

APPENDIX C

ENDANGERED SPECIES LIST FOR ST. CLAIR COUNTY, ILLINOIS

Latin Name	Species Name	Habitat	Status
<i>Botaurus lentiginosus</i>	American Bittern	freshwater marshes, wetlands	E
<i>Casmerodius albus</i> (Linnaeus)	Great Egret	Floodplain forests	E
<i>Egretta caerulea</i> (Linnaeus)	Little Blue Heron	Wetland forests, marshes	E
<i>Egretta thula</i> (Molina)	Snowy Egret	Lagoons and marshes of the American Bottoms	E
<i>Gallinula chloropus</i> (Linnaeus)	Common Moorhen	Freshwater marshes, lakes, ponds	T
<i>Lanius ludovicianus</i> Linnaeus	Loggerhead Shrike	Agricultural areas, grassland habitat	T
<i>Nycticorax nycticorax</i> (Linnaeus)	Black-crowned Night Heron	Wetland thickets, bottomland forests	E
<i>Podilymbus podiceps</i> Linnaeus	Pied-billed Grebe	Well vegetated lakes, ponds, marshes	E

Key:

E: Endangered Species

T: Threatened Species

APPENDIX D

REFERENCE DOCUMENTATION



ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

Metro / Thone
Report

CONTACT

Andy Buck

COMPANY OR AGENCY

Ill. St. Water Survey

POSITION

Geologist

CONTACT ADDRESS

Springfield, Ill.

CONTACT PHONE NUMBER

217-283-2210

E&E EMPLOYEE

Cathy Rauschen

DATE

August 10, 1995

TIME

1000 am

PROJECT NUMBER

0181UAA
ZT3051 EIL 0417VAA

SITE / PROJECT TITLE

Metro Disposal System Fairmont City, Illinois

DISCUSSION

East St. Louis obtains drinking water from the Illinois - America Water Co. The intakes where the water Co. obtains its water are from the Mississippi River. The locations of those intakes are: Township 2N 10W Sec. 11A and Township 4N 10W Sec. 28.8A.

Wood River has 6 wells from which they obtain drinking water. Wells 3, 4, 6 are @ 5N 9W Sec 28.7E. Wells 1, 2, 5 are @ 5N 9W Sec 28.8E. Wood River is its own municipality.

Fairmont City also obtains drinking water from the Ill. - Amer Water Co.

Pop of W.R. = 18040 and in 1993, they pumped 4083 m gal/yr. pumpage for people of Wood River.

SIGNATURE

Cathy Rauschen

recycled paper

PAGE

1

OF

1



ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

Metro Report
Thomas Report

CONTACT.

Connie

COMPANY OR AGENCY

IEPA Pub. Waters Div

POSITION

CONTACT ADDRESS

Springfield Ill.

CONTACT PHONE NUMBER

817-782-1724

EAE EMPLOYEE

Alex Rauschman

DATE

August 10 1995

TIME

4pm

PROJECT NUMBER

213051 E10181VAA
E10477VAA

SITE NAME

Large Sewer
Metropolitan Systems
Fairmont City, Ill

DISCUSSION

E. St. Louis, Belleville, and Fairmont
City all receive water from the Ill-
Amer. Water Co. ~ approx 132,000
Persons.

Wood River has a pop of 12240
Mound PWS = own community

SIGNATURE

Alex Rauschman

PAGE

6

OF

1



ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

Metro
Report

CONTACT.

Employee-Receptionist

COMPANY or AGENCY

Mounds Pub. Water Sup.

POSITION

Receptionist

CONTACT ADDRESS

1 Paul St. Collinsville IL 62034

CONTACT PHONE NUMBER

618-344-9264

E&E EMPLOYEE

Alex Dausel

DATE

August 10 1995

TIME

8pm

PROJECT NUMBER

EX0181VAA
ZT3051 E10417VAA

SITE NAME and LOCATION

Thomas Storage
Metro Disposal

Saintment City
Illinois

DISCUSSION

The Mounds PWS serves part of E. St. Louis
and the State Park Area (Collinsville). They
currently have 599 accounts.

They utilize groundwater. She did not
know where wells were, and referred me to
Ron Casellus.

SIGNATURE

Alex Dausel

PAGE

1

OF

1

recycled paper



ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE
Mounds Public
Water Systems
receptionist

CONTACT.

Ron Carsellus

COMPANY or AGENCY

Mounds Public Water Systems

POSITION

manager

CONTACT ADDRESS

1 Paul St. Collinsville, IL 62234

CONTACT PHONE NUMBER

618-344-9264

E&E EMPLOYEE

Alix Pauschman

DATE

August 14, 1995

TIME

2:30 pm

PROJECT NUMBER

ZT3051 E1C0181UAA
ZT3051 E1C041TVAA

SITE NAME and LOCATION

Thames Management Service
Metro Deposal Systems, Inc. Fairmont City
Illinois

DISCUSSION

The Mounds PWS obtains groundwater
for drinking water use. The well
is located near to the office.
The area is called State Park.

SIGNATURE

Alix Pausch

PAGE

1

OF

1



**ecology and
environment, inc.**

International Specialists in the Environment

Job Number ZT3051
EIL0055VAA

Swift Ag. Chem.
Drive by

&

*Photolog of Metro
Disposal (possible site ID)

FSIP

E & E Job Number ZT3051

Telephone Code Number _____

Site Name Swift Ag. Chem.

City/State Fairmont City/IL

TDD 05-9503-237

PAN EIL0055VAA

SSID _____

Start/Finish Date 4-13-95, 4-13-95

Book 1 of 1

E & E Emergency Response Center: (716) 684-8940

E & E Corporate Center: (716) 684-8060

MEDTOX Hotline: (501) 370-8263

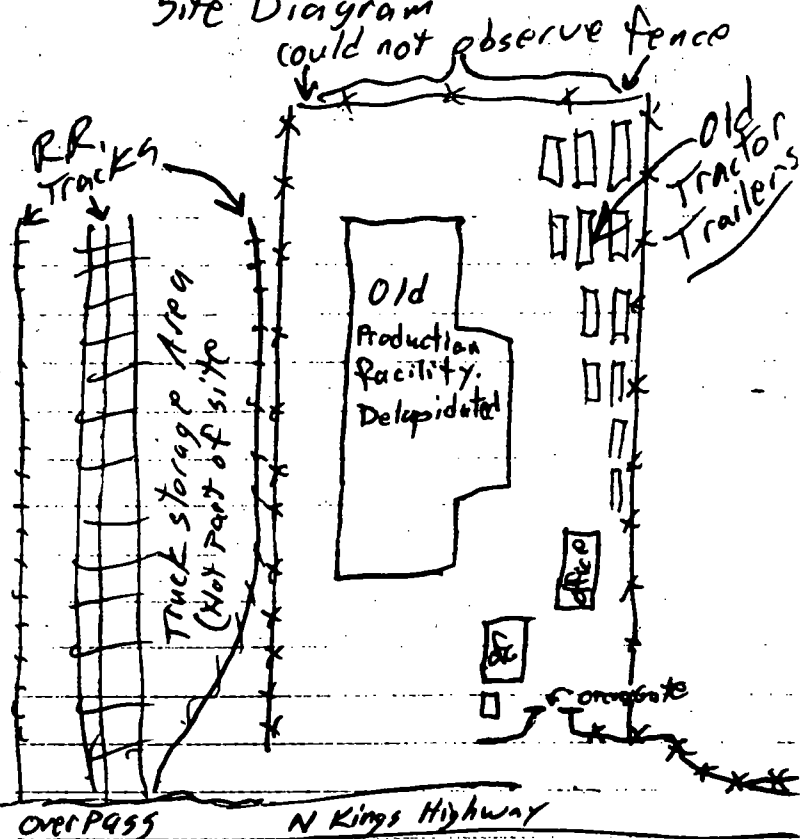
E & E Safety Director (Home): (716) 655-1260

4-13-95 Thurs, 2T3051

1104 Bob Meyers & Chad Eick locate
Swift Ag. chem. site @
2501 N. Kings Highway.

1113 Gate (Front) is open apparently for
business, but no business traffic
observed, site not easily Accessible.

Site Diagram

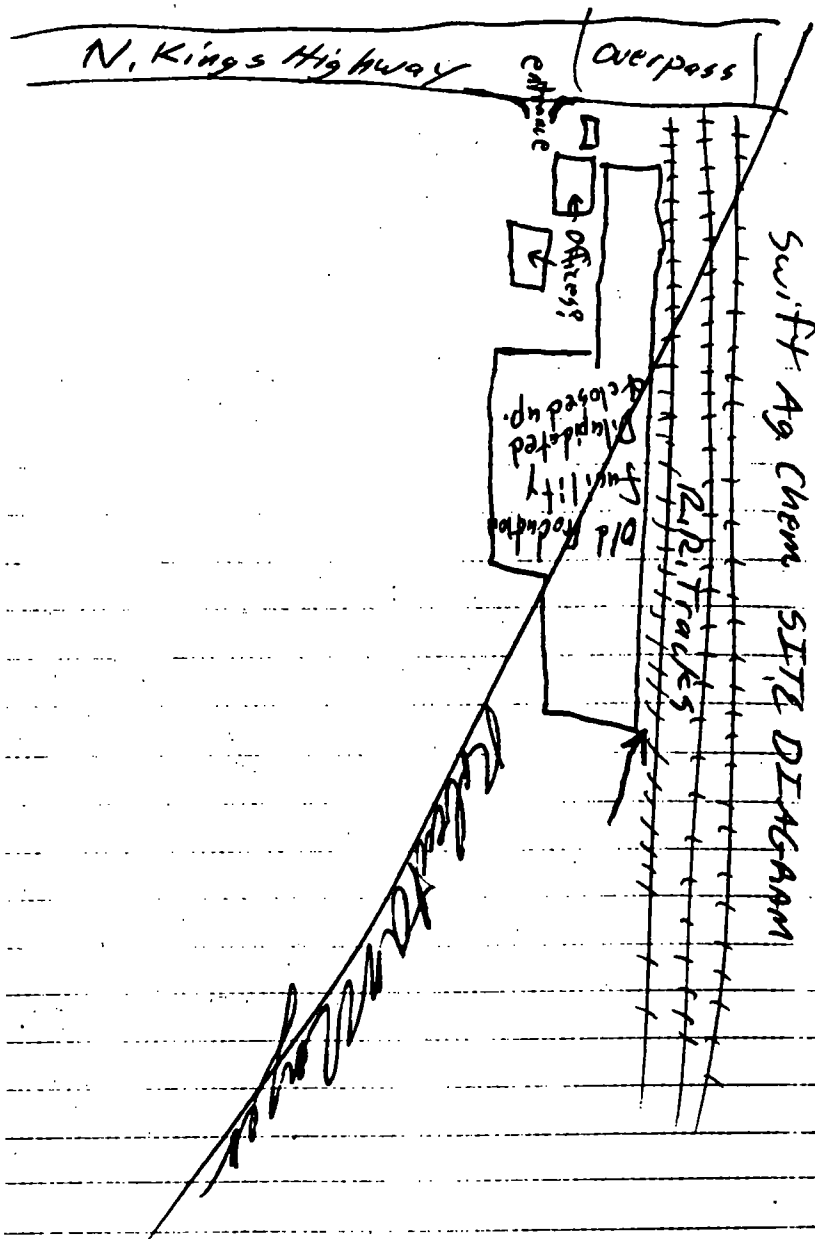


Overpass

N Kings Highway

1119 Depart

Robert A. Mann



4-13-95 ZT3051

Swift Ag Drive by,

1120 Observed a large chemical plant immediately across the street from site (General Chemical) and a large Tractor Trailer storage area behind the site and to the NW E. St. Louis Work side along N. Kings Highway.
• General Chem. appears active

Robert A. Myer

5
Metro Disposal 4-13-95 ZT3051
145 Bob Meyers & Chad Eich took
Photos, Roll #2, Frames 12, 13, 14 & 15
of the supposed Metro disposal
site, ID Not confirmed.

Bob Meyers

6

4-13-95 ZT3051

Photos of Swift Ag. Chem.
and surroundings.

1203 Take photos 21, 22, 23, 24, 25, 26
27+28 of facility & surroundings.

Robert A. Munnick

663 9415



**ecology and
environment, inc.**

International Specialists in the Environment

Job Number ZT3051

SITE NAME Multiple
TDD# Multiple
PAN# Multiple
SSID# _____
BOOK 1 OF 1

7/27/95

0700 Arrived at Site gate, gate is open.

Weather - Sunny, 75°F, Calm winds.

Met with B. H. Fourn

0710 Mike KENNA, and

Mike GRNEAL with Cigro, Inc.

• I handed Mike Kenna the U.S. EPA INTRO LETTER

1940 State of affairs

16. Post-Box Road, Sydney

50' - 80'

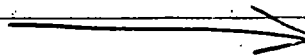
Original purchase, the price is 1986

after 86 it became bleeding +
bagging up.

Max Freeze joined the company in 1983

$\rho_{\alpha} = \dots$

Continue next page



Swift-Hy

7/27/95

* At the main blending area,
Mr. Freeze has 2-3 employees at the location.

* Mono Ammonium + Diammonium phosphate

Mini Services, is doing the clean up.

* Groundwater building, dry on asbestos
asbestos

* two ditches along the north and south
fence line.

* One underground storage area
removed per fire marshal
will send docs. to Chicago office.

* Mr. Freezes has 2 1700 gallon
fuel tanks with no containment.

* NO apparent off-site migration. Site run off
to the north and south and run off from
the Central portion of the building stays inside
it until evaporates.

* The site started operations in early 1940

Ugro, Inc., leased the property until it
purchased it in 1986. Major operation was
fertilizer blending and packaging for retail.

* The main blending building still contains
solid fertilizer (containing Mono-ammonium
phosphate and Diammonium phosphate)

* Mr. Kenna said that part of the contract with
the Leases, Mr. Freeze, is to cleanup the building
recycled paper
and blow dry fertilizer and sweep it in place ecology and environment

for RE-SALE TO LOCAL FARMERS

Swift Ag

7/27/85

- * Has Mr Freeze employees are not 40-hour trained OSHA 1910.120(e). Mr Kenna said there is no need for that.
- * Completed blending building inspection.
- * AT GRINDING plant. This plant contains a grinder and a dryer. The dryer is flame-operated.
- * The furnace contains loose asbestos
- * The GRINDING Building is not secured
- * There was one asbestos warning sign standing against the door step.
- * Mr Kenna said they are in the process of selecting a contractor for asbestos removal.
- * ~ 100' north of the blending Building there are 6 x 100,000 gallons concrete tanks for solid fertilizers, and numerous liquid ammonia and fertilizers, poly tanks. Mr Kenna says they all empty. The appears to be empty.
- * ~ 50' west of the Blending plant there was 45,000 gallon underground storage tank (fuel). The tank was removed along with certain contaminated soil per state and Fines Marshall Regs
- * Mr Kenna will Fax TAT a copy of the tank removal paperwork.
- * At the same location (~ 50' west of Bl Building) Mr Freeze, the Deasee has 2 x 700 gallon tanks, aboveground, with no containment.
- * There are two ditches to the north and

Swift Ag

7/27/95

- * The Site is fenced and secured
- * The nearest main water body Rose Lake is ~ 200 NE of the Site (down grade), but no apparent off site run-off of waste and contaminated water.
- * TAT collected ~ 8 photos (See Film #2 Frames # 17 - 21st)
- * NO Data available since last HRS 0930 Departed Site

Garry Site
7/27/95

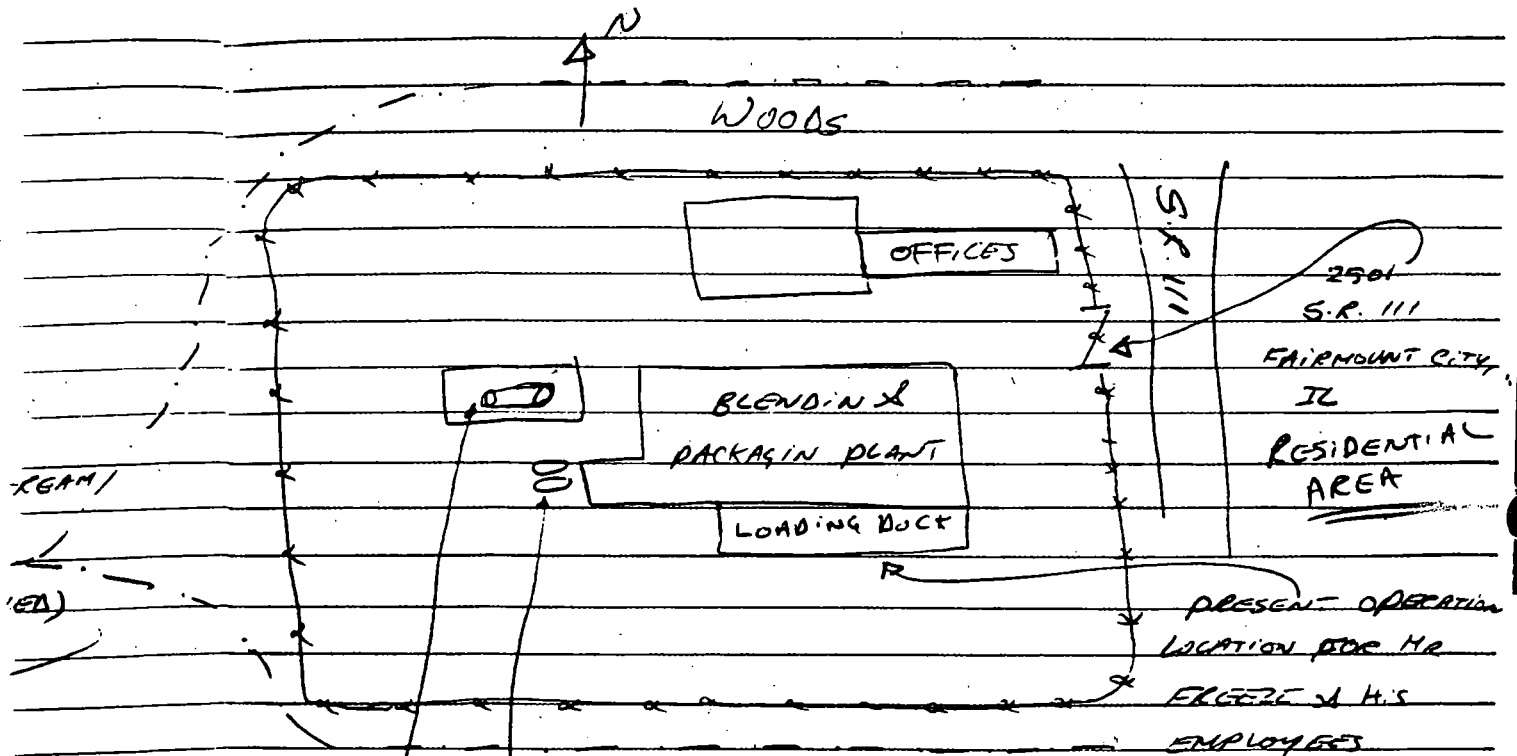
(SEE SITE SKETCH
ON PAGE 17)



Vigoro Industries, Inc.

Michael Neal
Director of Environmental Affairs

6 Executive Drive • P.O. Box 1986
Collinsville, IL 62234 Res: 618-632-4143
(618) 346-7448 Pager: 338-5522
(618) 346-7451 FAX Mobile: 973-9390



GRINDING PLANT, Deteriorated, NO SECURITY
NOTE DRYER contains friable asbestos

SWIFT Ag SITE SKETCH

7/27/95